

# Nathan Green

Department of Mathematics  
Louisiana Tech University  
501 Dan Reneau Dr  
Ruston, LA 71270

*e-mail:* [ngreen@latech.edu](mailto:ngreen@latech.edu)  
*web:* [Directory Page](#)

## Education

2018	Ph.D.	Mathematics	Texas A&M University (Advisor: Matt Papanikolas)
2013	M.S.	Mathematics	Brigham Young University
2011	B.S.	Mathematics	Brigham Young University

## Academic Positions

2021-present	Assistant Professor	Louisiana Tech University, Ruston, LA
2018-2021	SEW Visiting Assistant Professor	University of California, San Diego, CA

## Refereed Publications

- Nathan Green and Tuan Ngo Dac, On log-algebraic identities for Anderson t-modules and characteristic  $p$  multiple zeta values, submitted for publication, (2020), arXiv:2007.11060
- Nathan Green and Tuan Ngo Dac, Algebraic relations among special zeta values on elliptic curves, submitted for publication, (2020), arXiv:2004.08461
- Joseph Ferrara, Nathan Green, Zach Higgins and Cristian Popescu, An Equivariant Tamagawa Number Formula for Drinfeld Modules and Applications, accepted for publication, *Algebra and Number Theory*, (2020), arXiv:2004.05144
- Chieh-Yu Chang, Nathan Green and Yoshinori Mishiba, Taylor Coefficients of Anderson-Thakur Series and Explicit Formulae, *Math. Annalen* (2021), 379(2):1-50.
- Nathan Green, Special zeta values using tensor powers of Drinfeld modules, *Mathematical Research Letters*, vol. 26, (2019), no. 6, 1629 – 1676.
- Nathan Green, Tensor powers of rank 1 Drinfeld modules and periods, accepted for publication, *Journal of Number Theory*, (2019), arXiv:1706.03854.
- Nathan Green and Matt Papanikolas, Special L-values and shtuka functions, *Research in the Mathematical Sciences (RMS)* 5 (2018), no. 1, Paper No. 4, 47 pp.
- Nathan Green and Paul Jenkins, Integral traces of weak Maass forms of genus zero odd prime level, *The Ramanujan Journal*, (2016), 1–26.
- Valerio Dose, Nathan Green, Michael Griffin, Tianyi Mao, Larry Rolen and John Willis, Singular moduli for a distinguished non-holomorphic modular function, *Proceedings of the American Mathematical Society* 143 (2015), no. 3, 965–972.

## Talks Given

03/2021 Algebraic Independence of Zeta Values of General Curves, NT Seminar WSU  
03/2021 Algebraic Independence of Zeta Values of General Curves, NT Seminar Penn State  
03/2020 Algebraic Independence of Zeta Values of Elliptic Curves, NT Seminar BYU  
02/2020 Algebraic Independence of Zeta Values of Elliptic Curves, NT Seminar UCSD  
10/2019 A Galois Equivariant Class Number Formula, NT Series in LA, Occidental College  
05/2019 Logarithms and t-Motivic Multiple Zeta Values, Taipei Taiwan  
03/2019 Logarithms and t-Motivic Multiple Zeta Values, NT Seminar, U. Michigan  
11/2018 Hyperderivatives of t-Motivic Multiple Zeta Values, Pisa Italy  
06/2017 Tensor Powers and Zeta Values, Arithmetic of Function Fields Münster Germany  
04/2017 Tensor powers of Rank 1 Sign-normalized Drinfeld Modules, NT Seminar Texas A&M  
03/2017 Formulas for Special Values of L-functions in Drinfeld Modules, NT Seminar, BYU

11/2016 Formulas for Special Values of L-functions in Drinfeld Modules, NT Seminar, LSU  
 06/2016 Special L-values and Shtuka Functions, Canadian NTA Conference  
 02/2014 Integrality preserving properties of lifts in level 3, NT seminar, Texas A&M  
 12/2012 Integrality preserving properties of lifts in level 3, Palmetto NT Series  
 01/2012 Padé Approximants and Lindemann-Weierstrass Theorem, BYU comp. NT group, BYU  
 04/2011 Generalizing the continued fraction algorithm, Spring research conference, BYU  
 03/2011 Transcendence of 'e', BYU computational number theory group, BYU  
 04/2010 Finding units with the continued fraction algorithm, SRC, BYU

## Teaching

Winter 2022	LA TECH	470 - Topology
Fall 2021	LA TECH	408 - Abstract Algebra 1
Summer 2021	UCSD	20B - Calculus 2
Spring 2021	UCSD	103B - Abstract Algebra 2
Winter 2021	UCSD	103A - Abstract Algebra 1
Winter 2021	UCSD	20A - Calculus 1
Fall 2020	UCSD	20B - Calculus 2
Winter 2020	UCSD	103B - Abstract Algebra 2
Fall 2019	UCSD	102 - Linear Algebra 2
Fall 2019	UCSD	20B - Calculus 2
Spring 2019	UCSD	18 - Linear Algebra 1
Winter 2019	UCSD	103B - Abstract Algebra 2
Winter 2019	UCSD	20A - Calculus 1
Fall 2018	UCSD	201 - Linear Algebra 2
Spring 2018	TAMU	131 - Principles of Calculus
Fall 2017	TAMU	131 - Principles of Calculus
Spring 2017	TAMU	131 - Principles of Calculus
Fall 2016	TAMU	131 - Principles of Calculus
Summer 2016	TAMU	Algebra Qual Prep Course
Fall 2015	TAMU	131 - Principles of Calculus
Summer 2013	BYU	116 - Calculus For Business Students
Fall 2012	BYU	113 - Calculus 2
Summer 2012	BYU	113 - Calculus 2

## Service/Outreach

09/2018-Current UCSD Math Circle  
 06/2017-07/2017 TAMU Number Theory REU  
 02/2017-05/2018 TAMU Math Circle  
 08/2016-08/2018 TAMU SEE Math Camp

## Grants Received

2019 UCSD Department of Physical Sciences Research Communications Mini-Grant

## Awards Received

2017 (TAMU) L.F. Guseman Prize in Mathematics  
 2015 (TAMU) Houston A&M Mother's Club Outstanding TA Award  
 2012 (BYU) Spring Research Conference Session Winner